

Alberto Alvarez-Herrero

List of Publications by Year in descending order

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Version: 2024-02-01

70
papers

1,629
citations

361413

20
h-index

302126

39
g-index

70
all docs

70
docs citations

70
times ranked

1357
citing authors

#	ARTICLE	IF	CITATIONS
1	Hyperspectral camera based on liquid crystals for use in small satellites. , 2021, , .		1
2	Nonideal optical response of liquid crystal variable retarders and its impact on their performance as polarization modulators. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, .	1.2	7
3	The Polarimetric and Helioseismic Imager on Solar Orbiter. Astronomy and Astrophysics, 2020, 642, A11.	5.1	121
4	Optical design of the multi-wavelength imaging coronagraph Metis for the solar orbiter mission. Experimental Astronomy, 2020, 49, 239-263.	3.7	30
5	Metis: the Solar Orbiter visible light and ultraviolet coronal imager. Astronomy and Astrophysics, 2020, 642, A10.	5.1	115
6	Advanced iterative algorithm for phase calibration of spatial light modulators integrated in optical instrumentation in a vibration environment. Applied Optics, 2020, 59, 6760.	1.8	4
7	Ellipsometric characterization of Bi and Al ₂ O ₃ coatings for plasmon excitation in an optical fiber sensor. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, .	1.2	2
8	Optimization of the response time measuring method for liquid crystal variable retarders. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 062930.	1.2	2
9	Polarimetric performance of a polarization modulator based on liquid crystal variable retarders for wide acceptance angles. Journal of Astronomical Telescopes, Instruments, and Systems, 2019, 5, 1.	1.8	7
10	Liquid crystals for space instrumentation: optical properties of liquid crystal mixtures for polarimeters. Optical Materials Express, 2019, 9, 2681.	3.0	13
11	Validation of a spatial light modulator for space applications. , 2019, , .		2
12	Fine tuning method for optimization of liquid crystal based polarimeters. Optics Express, 2018, 26, 12038.	3.4	11
13	The High Resolution Telescope (HRT) of the Polarimetric and Helioseismic Imager (PHI) onboard Solar Orbiter. , 2018, , .		4
14	Calibration of the liquid crystal visible-light polarimeter for the Metis/Solar Orbiter coronagraph. , 2018, , .		1
15	Wide field of view liquid crystals-based modulator for the polarimeter of the Metis/Solar Orbiter. , 2018, , .		2
16	Fine tuning method for optimization of liquid crystal based polarimeters. Optics Express, 2018, 26, 12038-12048.	3.4	0
17	The Second Flight of the Sunrise Balloon-borne Solar Observatory: Overview of Instrument Updates, the Flight, the Data, and First Results. Astrophysical Journal, Supplement Series, 2017, 229, 2.	7.7	80
18	Evaluation of a liquid crystal based polarization modulator for a space mission thermal environment. Sensors and Actuators A: Physical, 2017, 266, 247-257.	4.1	10

#	ARTICLE	IF	CITATIONS
19	Evaluation of the refocusing system of the polarimetric helioseismic imager/full disk telescope of the solar orbiter mission. , 2017, , .		0
20	Ion irradiation effects on lithium niobate etalons for tunable spectral filters. , 2017, , .		0
21	Optical performance of the SO/PHI full disk telescope due to temperature gradients effect on the heat rejection entrance window. , 2017, , .		0
22	Analysis of optical properties behaviour of CLEARCERAM, fused silica and CaF2 glasses exposed to simulated space conditions. , 2017, , .		2
23	The polarization modulators based on liquid crystal variable retarders for the PHI and METIS instruments for the solar orbiter mission. , 2017, , .		5
24	Solar orbiter/PHI full disk telescope entrance window mechanical mount. , 2017, , .		1
25	Thermo-optic properties of hybrid solâ€gel thin films doped with Rhodamine 6G at high vacuum conditions. Journal of Materials Science, 2015, 50, 6677-6687.	3.7	5
26	Polarization modulators based on liquid crystal variable retarders for the Solar Orbiter mission. Proceedings of SPIE, 2015, , .	0.8	5
27	Analysis and evaluation of the Full Disk Telescope refocusing mechanism for the Solar Orbiter mission. Optical Engineering, 2015, 54, 084104.	1.0	2
28	The Polarimetric and Helioseismic Imager for <i>Solar Orbiter</i>: SO/PHI. Proceedings of the International Astronomical Union, 2014, 10, 108-113.	0.0	15
29	Preflight calibration of the Imaging Magnetograph eXperiment polarization modulation package based on liquid-crystal variable retarders. Applied Optics, 2012, 51, 4954.	1.8	5
30	Phase-shifting interferometry based on induced vibrations. Optics Express, 2011, 19, 584.	3.4	24
31	Space-qualified liquid-crystal variable retarders for wide-field-of-view coronagraphs. , 2011, , .		8
32	Detecting photons with orbital angular momentum in extended astronomical objects: application to solar observations. Astronomy and Astrophysics, 2011, 526, A56.	5.1	19
33	The Imaging Magnetograph eXperiment (IMaX) forÂtheÂSunrise Balloon-Borne Solar Observatory. Solar Physics, 2011, 268, 57-102.	2.5	229
34	The Sunrise Mission. Solar Physics, 2011, 268, 1-34.	2.5	199
35	The Wave-Front Correction System for the Sunrise Balloon-Borne Solar Observatory. Solar Physics, 2011, 268, 103-123.	2.5	82
36	Optical and Electroâ€optical Materials Prepared by the Solâ€Gel Method. Advanced Materials, 2011, 23, 5318-5323.	21.0	15

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37	The Solar Orbiter Mission and its Polarimetric and Helioseismic Imager (SO/PHI). Journal of Physics: Conference Series, 2011, 271, 012086.	0.4	24
38	Imaging polarimeters based on liquid crystal variable retarders: an emergent technology for space instrumentation. Proceedings of SPIE, 2011, , .	0.8	21
39	The IMaX polarimeter for the solar telescope SUNRISE of the NASA long duration balloon program. EPJ Web of Conferences, 2010, 5, 05002.	0.3	1
40	Optical inspection of liquid crystal variable retarder inhomogeneities. Applied Optics, 2010, 49, 568.	2.1	20
41	A comprehensive approach to deal with instrumental optical aberrations effects in high-accuracy photonâ€™s orbital angular momentum spectrum measurements. Optics Express, 2010, 18, 21111.	3.4	6
42	Measurement of the quantum superposition state of an imaging ensemble of photons prepared in orbital angular momentum states using a phase-diversity method. Physical Review A, 2010, 81, .	2.5	11
43	The Wave-Front Correction System for the Sunrise Balloon-Borne Solar Observatory. , 2010, , 103-123.		1
44	Free-carrier contribution to the optical response of N-rich Cu₃N thin films. Journal Physics D: Applied Physics, 2009, 42, 165101.	2.8	19
45	Luminescent and Optical Properties of Nanocomposite Thin Films Deposited by Remote Plasma Polymerization of Rhodamine 6G. Plasma Processes and Polymers, 2009, 6, 17-26.	3.0	16
46	Determination of the molecular tilt profile of a liquid crystal under applied electric field by generalized transmission ellipsometry. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 1188.	2.1	7
47	OWLS: a ten-year history in optical wireless links for intra-satellite communications. IEEE Journal on Selected Areas in Communications, 2009, 27, 1599-1611.	14.0	54
48	Optically Active Luminescent Perylene Thin Films Deposited by Plasma Polymerization. Journal of Physical Chemistry C, 2009, 113, 431-438.	3.1	37
49	IMaX: a polarimeter based on Liquid Crystal Variable Retarders for an aerospace mission. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1041-1045.	0.8	24
50	Temperature dependence of the optical and kinetic properties of photochromic spirooxazine derivatives in sol-gel thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1160-1163.	0.8	8
51	UV irradiation effects on TiO₂ thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1164-1167.	0.8	6
52	IMaX opto-mechanical integration: the AIV process for a magnetograph. Proceedings of SPIE, 2008, , .	0.8	0
53	Ellipsometric analysis of the spectral properties and dynamic transitions of photochromic thin films. Journal of the Optical Society of America B: Optical Physics, 2007, 24, 2097.	2.1	12
54	Liquid-crystal variable retarders for aerospace polarimetry applications. Applied Optics, 2007, 46, 689.	2.1	43

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55	Modeling of Absorption Induced by Space Radiation on Glass: A Two-Variable Function Depending on Radiation Dose and Post-Irradiation Time. IEEE Transactions on Nuclear Science, 2006, 53, 2367-2375.	2.0	8
56	Detailed design of the imaging magnetograph experiment (IMaX): a visible imager magnetograph for the Sunrise mission. , 2006, 6265, 1387.		3
57	Lithium niobate Fabry-Perot etalons in double-pass configuration for spectral filtering in the visible imager magnetograph IMaX for the SUNRISE mission. , 2006, , .		6
58	Surface effects in magnetic nanoparticles measured by means of a magneto-optical method. Journal of Applied Physics, 2005, 97, 064314.	2.5	9
59	Envelope analysis in spectroscopic ellipsometry of thin films. Application to a weakly-absorbing polymer film. Thin Solid Films, 2004, 455-456, 288-291.	1.8	1
60	Water adsorption in porous TiO ₂ -SiO ₂ sol-gel films analyzed by spectroscopic ellipsometry. Thin Solid Films, 2004, 455-456, 356-360.	1.8	15
61	Ellipsometric analysis of gamma radiation effects on standard optical coatings used in aerospace applications. Thin Solid Films, 2004, 455-456, 545-550.	1.8	16
62	High-Sensitivity Sensor of Low Relative Humidity Based on Overlay on Side-Polished Fibers. IEEE Sensors Journal, 2004, 4, 52-56.	4.7	64
63	Shrinkage control in a photopolymerizable hybrid solgel material for holographic recording. Applied Optics, 2004, 43, 4018.	2.1	38
64	The imaging magnetograph eXperiment for the SUNRISE balloon Antarctica project. , 2004, , .		15
65	IMax: a visible magnetograph for SUNRISE. , 2003, , .		4
66	Photopolymerizable hybrid sol-gel material for holographic recording. , 2003, 5216, 116.		1
67	Analysis of nanostructured porous films by measurement of adsorption isotherms with optical fiber and ellipsometry. Applied Optics, 2002, 41, 6692.	2.1	15
68	Adsorption of water on porous Vycor glass studied by ellipsometry. Applied Optics, 2001, 40, 527.	2.1	21
69	High-sensitivity temperature sensor based on overlay on side-polished fibers. IEEE Photonics Technology Letters, 2000, 12, 1043-1045.	2.5	33
70	Ellipsometric characterization and influence of relative humidity on TiO ₂ layers optical properties. Thin Solid Films, 1999, 349, 212-219.	1.8	42